

FORM-PTO-1390  
(Rev. 10-96)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**

032292-017

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)

Unassigned **09/554499**INTERNATIONAL APPLICATION NO.  
PCT/NO98/00226INTERNATIONAL FILING DATE  
July 29, 1998PRIORITY DATE CLAIMED  
November 17, 1997

## TITLE OF INVENTION

**ARRANGEMENT IN ONE OR MORE COMMUNICATION NETWORKS, WHEREIN COMMUNICATION CHANNELS ARE ESTABLISHED CHANNELS BETWEEN TWO OR MORE PARTIES**

## APPLICANT(S) FOR DO/EO/US

**Paul Torkil FJUK and Øyvind BREIVIK**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and the PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☒ has been transmitted by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
6. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ have been transmitted by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11. to 16. below concern other document(s) or information included:**

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A **FIRST** preliminary amendment.  
☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter.
16. ☒ Other items or information:

Unexecuted Declaration

U.S. APPLICATION NO. (If known, see 37 CFR 1.51) Unassigned <b>09/554499</b>		INTERNATIONAL APPLICATION NO. PCT/NO98/03226		ATTORNEY'S DOCKET NUMBER 032292-017	
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17. <input checked="" type="checkbox"/> The following fees are submitted:				CALCULATIONS		PTO USE ONLY	
<b>Basic National Fee (37 CFR 1.492(a)(1)-(5)):</b>  Search Report has been prepared by the EPO or JPO ..... \$840.00 (970)  International preliminary examination fee paid to USPTO (37 CFR 1.482) ..... \$670.00 (956) No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)) ..... \$690.00 (958)  Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... \$970.00 (960)  International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4) ..... \$96.00 (962)  <div style="text-align: right;"><b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b></div>				\$ 970.00			
Surcharge of \$130.00 (154) for furnishing the oath or declaration later than 20 <input type="checkbox"/> 30 <input type="checkbox"/> months from the earliest claimed priority date (37 CFR 1.492(e)).				\$ ---			
Claims	Number Filed	Number Extra	Rate				
Total Claims	19 -20 =	-0-	X\$18.00 (966)	\$ -0-			
Independent Claims	1 -3 =	-0-	X\$78.00 (964)	\$ -0-			
Multiple dependent claim(s) (if applicable)			+ \$260.00 (968)	\$ ---			
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$ 970.00			
Reduction for 1/2 for filing by small entity, if applicable. Verified Small Entity statement must also be filed. (Note 37 CFR 1.9, 1.27, 1.28).				\$ ---			
<b>SUBTOTAL =</b>				\$ 970.00			
Processing fee of \$130.00 (156) for furnishing the English translation later than 20 <input type="checkbox"/> 30 <input type="checkbox"/> months from the earliest claimed priority date (37 CFR 1.492(f)).				\$ ---			
<b>TOTAL NATIONAL FEE =</b>				\$ 970.00			
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 (581) per property +				\$ -0-			
<b>TOTAL FEES ENCLOSED =</b>				\$ 970.00			
				Amount to be:			
				refunded		\$	
				charged		\$	

a. ☒ A check in the amount of \$ 970.00 to cover the above fees is enclosed.

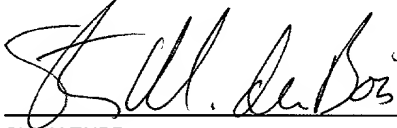
b. ☐ Please charge my Deposit Account No. 02-4800 in the amount of \$            to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 02-4800. A duplicate copy of this sheet is enclosed.

**NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.**

SEND ALL CORRESPONDENCE TO:

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 Steven M. du Bois  
 NAME  
  
35,023  
 REGISTRATION NUMBER

Patent  
Attorney's Docket No. 032292-017

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of	)	
	)	
Paul Torkil FJUK et al.	)	Group Art Unit: Unassigned
	)	
Application No.: Unassigned	)	Examiner: Unassigned
	)	
Filed: May 16, 2000	)	
	)	
For: ARRANGEMENT IN ONE OR	)	
MORE COMMUNICATION	)	
NETWORKS, WHEREIN	)	
COMMUNICATION CHANNELS	)	
ARE ESTABLISHED BETWEEN	)	
TWO OR MORE PARTIES	)	

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to examination, please amend the above-identified application as follows:

**IN THE CLAIMS**

Please amend claims 3 - 7, 9, 10, 14 - 17, and 19 as follows:

Claim 3, line 1, delete "or 2".

Claim 4, line 1, delete "any of the claims 1-3" and insert therefor --claim 1--.

Claim 5, lines 1 and 2, delete "any of the preceding claims" and insert therefor  
--claim 1--.

Claim 6, lines 1 and 2, delete "any of the preceding claims" and insert therefor  
--claim 1--.

Claim 7, lines 1 and 2, delete "any of the preceding claims" and insert therefor  
--claim 1--.

Claim 9, line 1, delete "or 8".

Claim 10, lines 1 and 2, delete "any of the preceding claims" and insert therefor  
--claim 1--.

Claim 14, line 1, delete "any of the preceding claim" and insert therefor  
--claim 1--.

Claim 15, lines 1 and 2, delete "any of the preceding claims" and insert therefor  
--claim 1--.

Claim 16, lines 1 and 2, delete "any of the preceding claims" and insert therefor  
--claim 1--.

Claim 17, lines 1 and 2, delete "any of the preceding claims" and insert therefor  
--claim 1--.

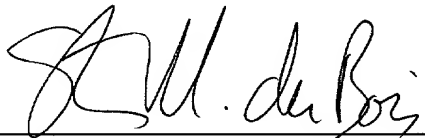
Claim 19, lines 1 and 2, delete "any of the preceding claims" and insert therefor  
--claim 1--.

**REMARKS**

The above amendments to the claims have been made in order to eliminate multiple dependencies. Favorable action on the merits of the application is respectfully requested.

Respectfully submitted,

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Date: May 16, 2000

ARRANGEMENT IN ONE OR MORE COMMUNICATION NETWORKS, WHEREIN  
COMMUNICATION CHANNELS ARE ESTABLISHED BETWEEN TWO OR MORE  
PARTIES

5

Field of the invention

The present invention relates to an arrangement in one or more communication networks, wherein communication channels are established between two or more parties connected to said communication network(s), said arrangement comprising communication services offering access to communication channels to interconnected parties.

15

Technical background

**The Problem Area**

Communication services offer access to communication channels to interconnected parties. Interconnectivity is realised by communication networks. Examples of communication services are: voice communication services, video conference services, and file transfer services. Examples of communication networks are: Public Switched Telephone Network (PSTN), Public Land Mobile Network (PLMN), Integrated Services Digital Network (ISDN), and the Internet.

The present invention provides a system for automatic establishment of related communication channels with support for automatic correlation of the information sent on the established communication channels.

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More specifically, the present invention provides a system for automatic creation of a group of communication channels between two or more parties connected to communications networks. The creation of a group of communication channels is initiated by external events. An identical correlation key, which may be used to identify a group, is sent on each of the communication channels belonging to a particular group. The key facilitates automatic correlation of information sent on the related communication channels at the terminal equipment of the parties involved.

#### Known Solutions and Problems with these

The problems that the present invention addresses are:

1. establishment of related communication channels; and
2. correlation of information sent on related communication channels.

The present invention provides automation of (1) and facilitates automation of (2), in a network centric fashion.

There are known solutions to (1) and (2). The known solutions pertain to the technical field of Computer Telephony Integration (CTI).

#### CTI

CTI combines computer technology and telephone technology. CTI may be used for call processing and for voice processing. Typically, CTI is used in Call Centre applications.

CTI call processing enables a computer to work alongside a human agent, helping the agent to handle calls more efficiently (eg., route customer incoming calls to an appropriate operator based on information in a customer database). With CTI voice processing, the computer takes the place of a human telephone operator and provides a gateway between the caller and the business information stored on the computer systems (eg., automated call answering).

10

#### CTI solutions

(1) A CTI system may automatically establish a telephony communication channel by initiating a call request to the telephone network.

15

(2) A CTI system may automatically correlate an incoming call (by extracting the Caller ID information element of signalling no. 7) with information stored in a customer database.

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#### CTI problems

CTI is very much dependant on the control functions provided to it by the telephone network. For instance, CTI relies heavily on the Caller ID information element of signalling system no. 7 to correlate incoming calls with information in customer databases. CTI cannot control the information sent from the telephone network, it can merely inspect it. Since it cannot control such information it is confined and limited by restrictions imposed by the telephone network.

30

CTI is terminal centric in the sense that the logic and functionality is provided solely by additional terminal equipment (PABXs and computers) interacting with the

telephone network. Automatic establishment of calls is initiated by additional terminal equipment requesting a service from the telephone network. CTI provides a means of adding value to the services offered by the telephone network. However, the revenue margins for this added value is out of reach for the traditional network operator since the means is provided by customer terminal CTI equipment - not by the network itself.

10

Further prior art

From WO 9638018 (LM Ericsson) there is known a method using an intelligent network that is invoked during call connection to provide connections and other information. The intelligent network can be connected to by ISDN or PSTN based telephones or via gateways to data networks, e.g. the Internet. The intention of this prior art is mobility within the data network in connection with conventional PSTN services. The internet may be used in order to locate the user, which may be a mobile unit in the data network. However, the prior art is silent about any correlation between sessions and is also silent about using Internet for setting up sessions, and still more silent about transferring a correlation key for facilitating such set-up.

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Objects of the invention

An object of the present invention is to provide a system for automatic establishment of related communication channels.

35

Another object of the present invention is to provide support for such automatic correlation of the information sent on the established communication channels.



Still another object of the present invention is to provide a system for automatic creation of a group of communication channels between two or more parties  
5 connected to communications networks.

Yet another object of the present invention is in connection with such an automatic correlation of sessions to use a correlation key for further optimizing said  
10 system.

#### Summary of the invention

15 These objects are achieved in a system as stated in the preamble, which according to the present invention is characterized in that said arrangement further comprises control means for automatic establishment of related communication channels with support for automatic  
20 correlation of the information sent on said established communication channels.

More specifically, it can be said that said control means (CU1) communicate with an external system (E) which in turn  
25 comprises event related data, which data can either be called upon by the control means (CU1) or be transferred thereto when certain events occur, so as to initiate the creation of one or more groups of communication channels, substantially on the basis of external events.

30 Consequently, the present invention solves the problems enfacd with the previously discussed CTI problems, and generally improves the utilization of communication networks.

35 By providing a system that enables complete control over correlation information coupled with automatic

establishment of communication channels in a network centric fashion, the restrictions imposed by the telephone network are overcome and the traditional network operator may offer a set of new value added services. In addition, the present invention provides a mechanism for initiating such services by external events.

Further features and advantages of the present invention will appear from the following description taken in connection with the enclosed drawings, as well as from the enclosed patent claims.

Brief discussion of the drawings

Fig. 1 is a schematic drawing illustrating the principle of an arrangement according to the present invention, comprising the main components thereof.

Fig. 2 is a schematic drawing illustrating an example of application according to the present invention, especially in connection with an internet enabled call centre.

Fig. 3 is a schematic drawing illustrating a further example of an application according to the present invention, especially related to stock watching.

Detailed description of embodiments

In Fig. 1 there is illustrated schematically the general principle of an arrangement according to the present invention, said Figure illustrating an example of components necessary for implementing an embodiment thereof.

The invention presents a solution that may be based on two logical interacting control units, Control Unit 1 (CU1) and Control Unit 2 (CU2), respectively. The two control units, with their interaction, form a system that enables  
5 automatic establishment of communication channels with support for automatic correlation of information sent on the communication channels at the terminal equipment of the parties involved. An example of communication channels that may have correlation support by the present invention  
10 is telephony calls and information stored on the Internet.

CU1 and CU2 are located within communications networks (eg. a PSTN or the Internet) and are capable of establishing communication channels (S1, S2) between two  
15 or more parties connected to the communication networks. CU1 and CU2 may both act as parties in communication sessions. CU1 and CU2 may be located within the same communications network or they may each be located within different communications networks. CU1 and CU2 are logical  
20 units in the sense that their physical implementation may coexist, and coexist with other components. A communication path interconnects CU1 and CU2.

E is an external system that contains data or can produce  
25 data, or both, that is used as input to CU1. A communication path interconnects CU1 and E. Input to CU1 is denoted D. D must consist of control information that can be used by CU1, and may be used by CU2, to establish sessions. D may also contain user information that may be  
30 transferred by CU1 or CU2, or both, to one or more parties involved in the channels to be established.

CU1 may request and initiate a transfer of input (D) from E or E may initiate a transfer of input (D) to CU1. Input  
35 (D) to CU1 is initiated when certain events occur. Examples of events are: a date, the stock exchange reaches a certain threshold, a temperature measurement reaches a

certain limit, an Internet user has filled in a registration form and initiated a transfer of information to a server (which may be E), and so on. If CU1 is used to initiate a transfer of input (D), then CU1 contains logic  
5 for the monitoring of events of interest that trigger a transfer of input (D).

When CU1 receives input (D) from E, CU1 generates a key (K). The key (K) facilitates automatic correlation of  
10 information sent on the communication channels (S1 and S2) at the terminal equipment of the parties involved. The correlation key (K) may be generated based upon the information contained in D (e.g. the correlation key generated may be based upon the phone number of Party A if  
15 this were contained in D), or it may be based upon information contained in CU1, or both.

When the key (K) has been generated, CU1 may establish one or more communication channels (S1). The communication  
20 channels (S1) may be established based upon control information contained in D (e.g. the telephone numbers of two parties if these were contained in D, or the e-mail address of one party if this were contained in D) or it may be based upon information contained in CU1 (e.g. a  
25 stored e-mail or FTP address), or both. A communication session involves two or more parties (e.g. the placing and receiving parties in a traditional telephone call/session). CU1 may itself act as one of the parties in a session (S1) (eg., as the sending party of an e-mail  
30 message in an internet session, or as the placing party with stored voice messages in a telephony call/session).

The key (K) is transferred from CU1 onto the communication channels (S1) that have been established. If CU1 acts as a  
35 party in a session, then the user information (from D) and other information produced or contained in CU1 may be

distributed from CU1 onto one or more of the communication channels (S1).

Next, the key (K) is transferred from CU1 to CU2.

- 5 CU1 may at any time transfer additional control information to CU2. Control information from CU1 to CU2 may contain information from D (eg., control information with for instance telephone numbers, or user information).
- 10 When CU2 receives a key (K) it may establish one or more communication channels (S2). The communication channel (S2) may be established based upon the key (K) or based upon information contained in CU2. A communication session involves two or more parties. CU2 may itself act as one of
- 15 the parties in a session (S2). The key (K) is transferred from CU2 onto the communication channel (S2) that have been established.

- CU1 and CU2 may now have established a number of
- 20 communication channels, each session involving two or more parties. Every party involved has received the key (K) on the session or sessions that they participate in. If a party is involved in two or more of the established sessions, then the party may now use the key (K) to
- 25 correlate the particular sessions.

#### Restrictions

- For correlation of sessions to take place at a party, the party must have received the key (K) on all the
- 30 communication channels belonging to the group. If the transfer of (K) on a session to a destined party is delayed, perhaps due to network latency, so that (K) is not readily available on all sessions, then correlation of these sessions cannot take place. The problem may be
- 35 solved by CU1 not sending the correlation key before S1 has been established.

### Advantages

The present invention enables a network operator to offer new value added services that augments the functions  
5 provided by CTI equipment.

### Broadening

10 The following sections exemplify two possible applications of the invention.

#### Example Application: Internet enabled call centre

The present invention can be used to construct an Internet  
15 enabled call centre application, as illustrated in Figure 2.

Products and services may be ordered using the Internet. A typical procedure is the following: An Internet user, and  
20 potential customer, fills in a registration and purchasing form specifying name, address, telephone number and similar personalia, as well as information regarding the product or service of interest. Such forms are often found under the homepage of businesses offering transactions on  
25 the Internet. Once the Internet user has filled in the required form, the user often has to click on a web button to send the information off to the sales department of the business in question. The sales department may thereafter ship the requested product or service out to the customer  
30 based upon the information that the Internet user has specified.

Products and services may be ordered using the PSTN. A typical procedure is the following: A PSTN user, and  
35 potential customer, initiates a phone call to the business of interest. The business may subscribe to certain IN services that route the call to, for instance, the sales

department that is open for business at the particular time of day. Furthermore, that sales department may subscribe to certain IN services that enable the PSTN user to navigate his call to an applicable sales representative via a telephone menu. Once the PSTN user reaches a sales representative at the other end, the PSTN user may specify name, address, telephone number and similar personalia, as well as information regarding the product or service of interest. The sales department may thereafter ship the requested product or service out to the customer based upon the information that the PSTN user has specified.

The present invention may be used to enable a combination of the two above scenarios by correlating Internet sessions with PSTN sessions.

(0) A person (Party A) may be interested in purchasing a product or service of some category. The person may log onto the Internet from a computer and search for businesses that advertise for such products or services by means of homepages on the Internet. One such business may make use of the present invention. If the person (Party A) finds the offerings from this business of interest he may, for instance, fill out a registration and purchasing form specifying his name, address, telephone number and similar personalia, as well as information regarding the product or service of interest. The form may be found on the system (E) that handles the homepage of the business in question. This system may be a web server. Once the person (Party A) has filled in the required form, the person (Party A) may, for instance, click (an external event) on a web button in order to (using the present invention) establish a call with the sales department and to send the information off to the sales department. The information that the person has filled in may be augmented (by the external system E) with, for instance, the telephone number of the sales department (which is still using

intelligent routing) and with the address of an FTP-serve of the sales department.

- 5 (1) Once this information (D) has been assembled the system (E) may initiate a transfer of the information to the first control unit (CU1). In this scenario, CU1 is located within the Internet.
- 10 (2) CU1 first generates a correlation key (K). The correlation key generated is the phone number of Party A (which is contained in D).
- 15 (3) CU1 may then establish a session (S1) with Party B, using the FTP-address of the sales department contained in D. In this scenario one session (S1) is established by CU1 and the session pertain to Internet. CU1 acts as the sending party in this session. The correlation key (K) and D are transferred to the FTP-server of Party B on S1.
- 20 (4) The correlation key (K) is sent to the second control unit (CU2). In this scenario, CU2 is located within the PSTN. CU1 sends control information (containing the phone number of Party A and the phone number of Party B) prior to sending K.
- 25 (5) CU2 may then establish one session (S2) between Party B and Party A. In this scenario this session (S2) is a telephone call between Party B and Party A.. CU2 does not act as a party in this session.
- 30 (6) The correlation key (K) is transferred on S2 using, for instance, the information elements calling party ID or signalling no. 7.
- 35 (7) Now the form information that the Internet user (Party A) has registered on the homepage of the business has been transferred to the FTP-server of Party B. The correlation key (K) has also been transferred along with



the form information. A call has been established between the Internet user (Party A) and the sales department (Party B). The correlation key (K) has been transferred on S2. The sales department can now automatically fetch the form information from the FTP-server using the correlation key.

**Example Application: StockWatch**

The present invention can be used to construct a StockWatch application, as illustrated in Drawing 3. The scenario depicted involves two parties: the holder of a certain stock (Party A) and a stockbroker (Party B).

(0) An external system (E) continuously monitors the stockexchange index; and

(1) (CU1) continuously fetches updated stockvalues (D) of interest from (E). In this scenario (E) and (CU1) are located within the Internet; and (E) interacts with a stockexchange computer.

(2) (CU1) contains logic for monitoring certain stockindex events. For instance, (CU1) may monitor the value of the stock that Party A holds. In the event that the value of the stock plunges to a certain threshold, (CU1) first generates a correlation key (K). The correlation key (K) consists of the phone number of Party A and the phone number of Party B.

(3) Next, (CU1) establishes two channels (S1), one to Party A and one to party B, and transfers the current stock value as well as the correlation key (K) to both parties. (CU1) acts as the sender of information on S1 to Party A and on S1 to Party B. The sessions over (S1) could for instance be a transfer of information by e-mail or a file transfer by FTP.

(4) CU1 transfers the correlation key (K) to CU2.

(5) CU2 establishes one channel (S2) between Party A and Party B. The channel pertains to a telephone call between Party A and Party B. (CU2 could for instance be a Service Control Point (SCP) in an Intelligent Network (IN) interacting with a Service Switching Point (SSP)).

(6) CU2 transfers the correlation key (K) during the establishment phase of S2 (eg. manipulating the calling party ID of signalling system no. 7).

(7) Now both the holder and the broker of the stock have recieved the current stock value (on S1); and a telephone call (S2) has been set up between the two parties. The correlation key (K) has been sent on both S1 and S2, to both parties. Using a CTI system, the current stock value could automatically be retrieved and displayed on the computer screen when the holder and broker pick up their telephones.

14-01-2000

P a t e n t     c l a i m s

(amended 14 January 2000)

1. Arrangement in one or more communication networks,  
5 wherein communication channels are established between two or more parties connected to said communication network(s), said arrangement comprising communication services offering access to communication channels to interconnected parties, wherein specific keys are used to  
10 ensure that communication messages are sent to the parties in question,  
c h a r a c t e r i z e d     i n     that the arrangement comprises a first control unit (CU1) which is connected to an external system (E) adapted to contain or/and produce  
15 data (D), and which is able to establish first communication channels (S1) between two or more parties (A, B) at first user terminals thereof, and comprises a second control unit (CU2) which is connected to first said control unit (CU1) and is adapted to establish second  
20 communication channels (S2) between said two or more parties (A, B) at second terminals thereof, and that said first control unit (CU1) comprises monitoring means for monitoring certain events, and also comprises correlation key means for generating a correlation key (K) when one of  
25 such monitored events occurs, said correlation key (K) being sent on said first channels (S1) together with data (D) from said external system (DE) and said correlation key (K) also being sent via said second control unit (CU2) together with appropriate signalling information, on said  
30 second channel (S2), so that both party internal communication is established between the terminals thereof and also dual channel (S1, S2) communication between the parties involved is established.
- 35 2. Arrangement as claimed in claim 1,  
c h a r a c t e r i z e d     i n     that said first control unit (CU1) communicate with an external system (E) which

in turn comprises event related data, which data can <sup>14-01-2000</sup>  
either be called upon by the first control unit (CU1) or  
be transferred thereto when certain events occur, so as to  
initiate the creation of one or more groups of  
5 communication channels (S1, S2), substantially on the  
basis of external events.

3. Arrangement as claimed in claim 1 or 2,  
c h a r a c t e r i z e d i n that said events may  
10 comprise a date, stock exchange thresholds, temperature  
measurements, registration forms with parameters for  
transfer of information, or similar events with  
appropriate monitoring thereof.

15 4. Arrangement as claimed in any of the claims 1-3,  
c h a r a c t e r i z e d i n that examples of  
services may comprise: voice communication services, etc.  
and that examples of communication networks are: Public  
Switched Telephone Network (PSTN), Public Land Mobile  
20 Network (PLMN), Integrated Services Digial Network (ISDN),  
as well as Internet, etc.

5. Arrangement as claimed in any of the preceding  
claims,  
25 c h a r a c t e r i z e d i n that said control units  
(CU1, CU2) are located within one or more of said  
communication network(s).

6. Arrangement as claimed in any of the preceding  
30 claims,  
c h a r a c t e r i z e d i n that said control units  
(CU1, CU2) are interconnected by a communication path.

7. Arrangement as claimed in any of the preceding  
35 claims,  
c h a r a c t e r i z e d i n that one of said  
control units (CU1) is connected to said external system  
(E) preferably by a communication path (D) through which

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said one control unit (CU1) receives control information  
to be used by said one control unit (CU1).

8. Arrangement as claimed in claim 7,

5 c h a r a c t e r i z e d i n that said control  
information (D) which is transferred from the external  
system (E) to said one control unit (CU1) can also be used  
by said second control unit (CU2) for establishing  
sessions.

10

9. Arrangement as claimed in claim 7 or 8,

c h a r a c t e r i z e d i n that the information  
(D) transferred from said external system (E) to said two  
control units (CU1, CU2) may be transferred respectively  
15 therefrom to one or more parties involved in the channels  
to be established.

10. Arrangement as claimed in claim 1,

c h a r a c t e r i z e d i n that said correlation  
20 key (K) is generated based upon the information contained  
in the data (D) transferred from said external system (E),  
for example based on:

- 25 a) the telephone number of one of the parties (A),  
b) further information contained in said control unit  
(CU1),  
c) or both.

11. Arrangement as claimed in any of the preceding  
30 claims,

c h a r a c t e r i z e d i n that said first control  
unit (CU1) is adapted to act as one of the parties in a  
session (S1), or as the placing party, for example with  
stored voice messages in a telephone call/session.

35

12. Arrangement as claimed in any of the preceding  
claims,

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characterized in that said first control unit (CU1) is adapted to transfer the relevant key (K) on to established communication channels (S1), and if said control means (CU1) acts as a party in a session then  
5 further information, especially user information obtained from said external system (E) or contained in the control means (CU1) itself may be distributed therefrom on to one or more communication channels (S1).

10 13. Arrangement as claimed in any of the preceding claims,

characterized in that said first control unit (CU1) is adapted to transfer the relevant key (K) as well as additional control information to any further  
15 control means (CU2), for thereby allowing said further control means (CU2) to establish one or more further communication channels (S2) based upon said key (K) or based upon information contained in said further control means (CU2).

20

14. Arrangement as claimed in claim 17,

characterized in that said second control unit (CU2) is adapted to transfer the relevant key (K) on to established communication channels (S2).

25

15. Arrangement as claimed in any of the preceding claims,

characterized in that if one party is involved in two or more of the established sessions, then  
30 the key (K) received by said party may be used to correlate said particular session or sessions, provided said party has received said key (K) on all communication channels belonging to the associated group of communication channels or group of sessions.

35

16. Arrangement as claimed in any of the preceding claims,

c h a r a c t e r i z e d    i n    t h a t   t h e   e x t e r n a l   14 -01- 2000.  
system (E) handles the home page of a business, and is for  
example a web server, and that the first control unit  
(CU1) is located within the Internet.

5

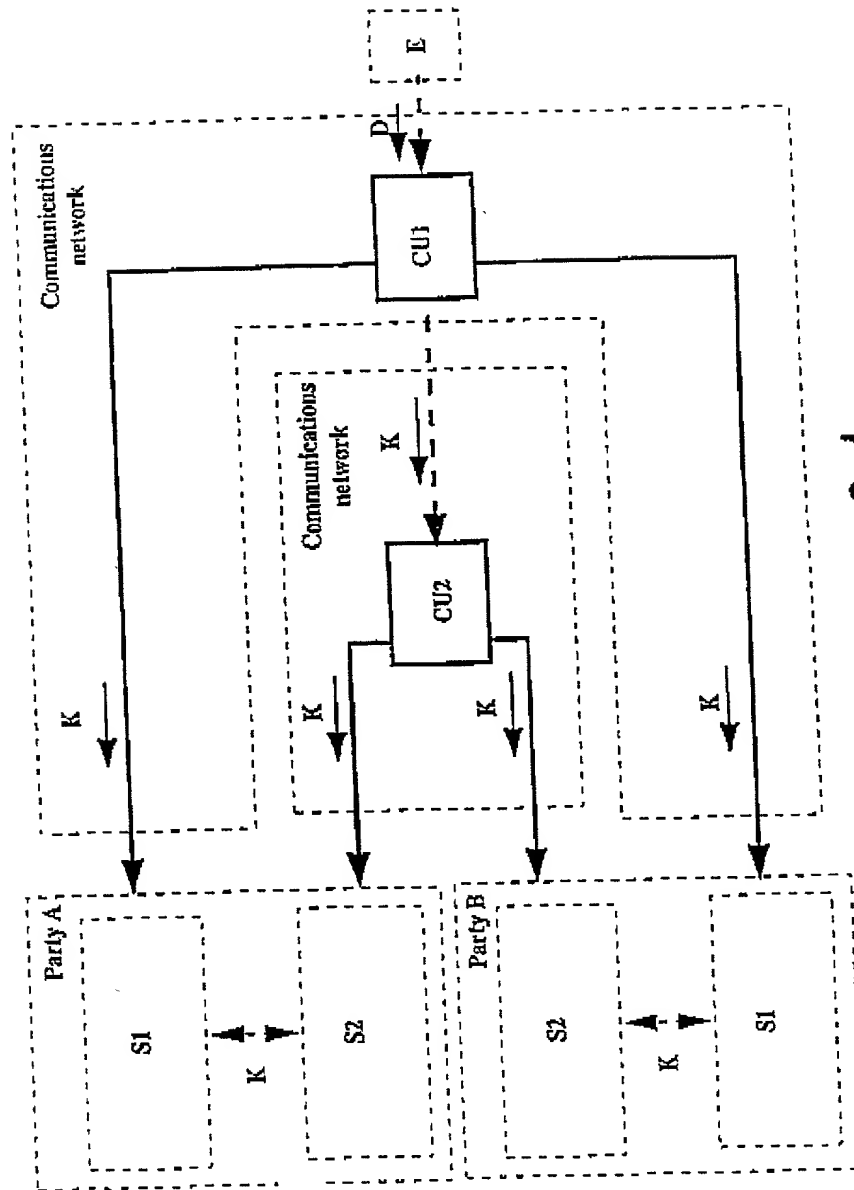


FIG. 1

The Components of the Invention





### Example Application, Internet Enabled Call Centre

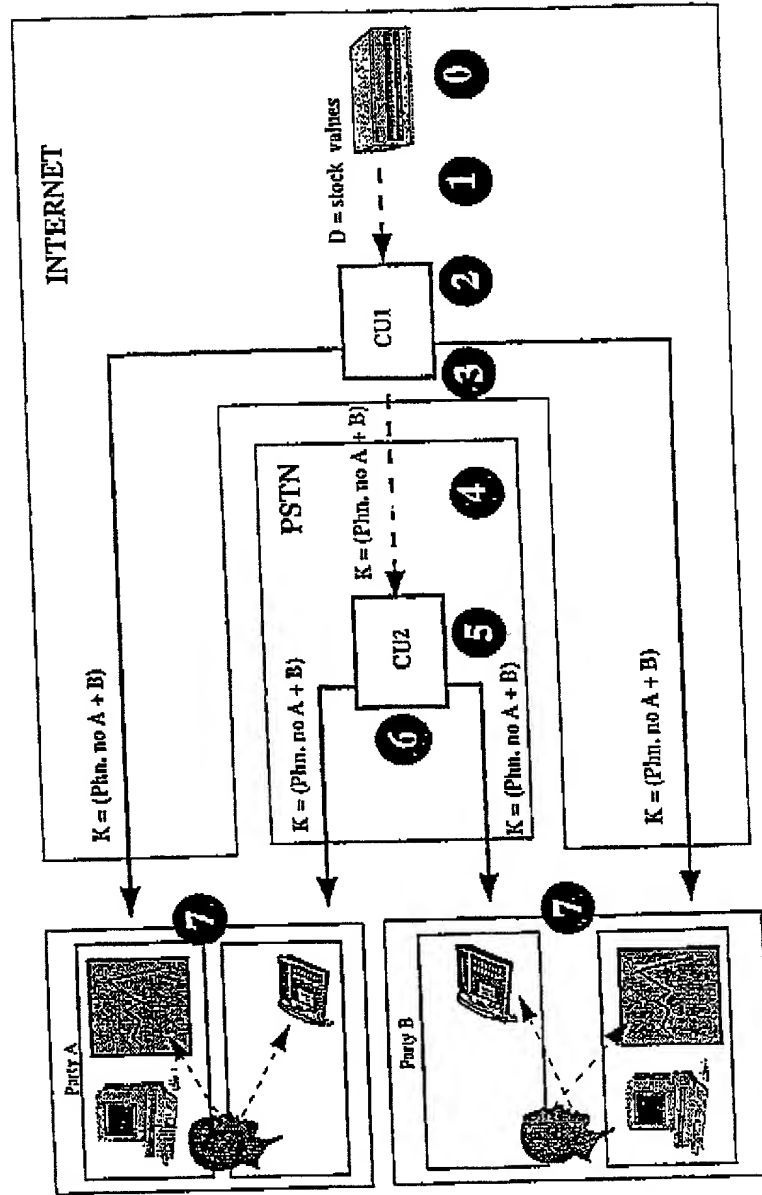


FIG.3

Example Application, StockWatch

**COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY**  
(Includes Reference to Provisional and PCT International Applications)

Attorney's Docket No.

032292-017

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**ARRANGEMENT IN ONE OR MORE COMMUNICATION NETWORKS, WHEREIN COMMUNICATION CHANNELS ARE ESTABLISHED BETWEEN TWO OR MORE PARTIES**

the specification of which (check only one item below):

☐ is attached hereto.☐ was filed as United States application

Number \_\_\_\_\_

on \_\_\_\_\_

and was amended

on \_\_\_\_\_ (if applicable).

☒ was filed as PCT international applicationNumber PCT/NO98/00226on July 29, 1998

and was amended

on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 (a)-(e) of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

**PRIOR FOREIGN/PCT APPLICATION(S) AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. §119:**

COUNTRY (if PCT, indicate "PCT")	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 U.S.C. §119
Norway	975259	17 November 1997	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below.

(Application Number)

(Filing Date)

(Application Number)

(Filing Date)

JUN-21-2000 18:03

BURNS DOANE SWECKER MATHIS

P.06/09

**COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY (CONT'D)**  
 (Includes Reference to Provisional and PCT International Applications)

Attorney's Docket No.

032292-017

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose to the Office all information known to me to be material to the patentability as defined in Title 37, Code of Federal Regulations §1.56, which became available between the filing date of the prior application(s) and the national or PCT international filing date of this application:

**PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. §120:**

U.S. APPLICATIONS		STATUS (check one)		
U.S. APPLICATION NUMBER	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
PCT APPLICATIONS DESIGNATING THE U.S.				
PCT APPLICATION NO.	PCT FILING DATE	U.S. APPLICATION NUMBERS ASSIGNED (if any)		

I hereby appoint the following attorneys and agent(s) to prosecute said application and to transact all business in the Patent and Trademark Office connected therewith and to file, prosecute and to transact all business in connection with international applications directed to said invention:

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY (CONT'D)**  
(Includes Reference to Provisional and PCT International Applications)

Attorney's Docket No.  
032292-017

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